

Summary of Programmatic Approach & Level of Detail

Ecosystem Restoration Component

CALFED is working to achieve a healthy Bay-Delta ecosystem that provides for the needs of plants, animals, and people using the system. At the programmatic level the ecosystem restoration program is based on establishing a vision of what the restored Bay-Delta ecosystem should look like, and identifying a strategy for restoration of ecosystem elements (plant and animal populations, habitats and communities) and natural processes (functions) that support the elements.

Program Level Actions - Level of Detail

The Ecosystem Restoration component is intended to provide an approach to reverse the decline in ecosystem health in the Bay-Delta. Its function is to provide a direction rather than a prescription for future actions. Targets and actions which are developed to achieve the vision of ecosystem restoration, will be presented as estimates and ranges which provide reasonable upper and lower limits of what is likely to be required to successfully achieve the ecosystem restoration objectives. Upper and lower limits of the ranges will be explained and justified so there is a common understanding as to why these limits were established. The Ecosystem Restoration component is not intended to be specific as to project locations, sizes, volumes, or specific actions.

The following are examples of an appropriate Ecosystem Restoration component program level action, an action which is too general to provide sufficient information, and an example of a project level action which is too specific for the programmatic evaluation which is being conducted.

Appropriate Program Level Action

Increase the total acreage of tidal, shallow, perennial wetland habitat by 15,000-30,000 acres throughout the program area. Wetland development will occur in a variety of areas throughout the Bay-Delta and Central Valley. (For example it is anticipated that there would be an increase of 2,000-6,000 acres in the north Delta.)

Too General:

Increase the acreage of wetland habitat by up to 60,000 acres.

Project Level Action - Too Specific:

Construct 2,542 acres of tidal wetland habitat on the northern half of Daniel Farms property in Yolo County.

Programmatic Impact Analysis

The assessment process and impact analysis for the Ecosystem Restoration component will be used to measure and discuss changes in resource categories (such as fisheries, vegetation and wildlife), distinguish the relative differences between the alternatives, and identify adverse and beneficial impacts for each of the alternatives when compared to the No Action Alternative and existing conditions.

The assessment process for the biological environment is being developed with assistance from agency and stakeholder technical experts. A variety of species and habitat types will be addressed in the assessment, including open-water and tidal wetlands, saline, brackish and freshwater wetlands, riparian and riverine habitats and upland habitats. The proposed assessment methods for fisheries impacts will evaluate changes to those resources that affect ecosystem functions and species populations within the aquatic ecosystem.

For terrestrial wetland and aquatic habitats, the analysis will compare potentially affected habitat types and populations of special-status species in broadly defined areas. Geographic comparisons will be done using GIS, aerial photographs and hard-copy maps of habitat-type distributions. In addition to assessing changes in area, the relative importance of habitats will be evaluated. The assessment of impacts to habitat will consider:

- How much of the habitat type is available;
- Is the habitat located in areas of high value for plants and wildlife;
- What is the overall quality and successional stage;
- How the habitat is oriented to other habitat types.

Presentation of Results

Results from impact analysis will be presented in both the Technical Reports for each resource category and the Programmatic EIR/EIS. The Technical Reports will be used to display the detailed results of impact analysis. These results will be summarized, and the summaries will be presented in the Programmatic EIR/EIS.

Technical Reports

Results from impact analysis will be presented in supplemental Technical Reports for Fisheries, Vegetation and Wildlife and Special Status Species. The Technical Reports will identify differences between the Preferred Program and each of the alternatives when compared to the No Action Alternative. To ensure no potential adverse impacts are overlooked or diminished, there will also be a comparison of the Preferred Program and each of the alternatives

to existing conditions. These Technical Reports will contain information on the specific assessment methods used, the criteria used for determining significance, presentation of direct and indirect adverse and beneficial impacts for each identified assessment variable, identification of potential significant impacts and associated mitigation strategies for addressing significant impacts and identification of potential significant unavoidable impacts. For example, changes in shaded riverine aquatic habitat will be measured by using GIS, aerial photographs and hard-copy maps of habitat-type to compare general estimates of area of this habitat expected under the No Action Alternative, the Preferred Program and each of the alternatives. In addition to area, GIS, aerial photographs and hard-copy maps will be used to evaluate the total overall quantity of SRA available, if the habitat is located along important corridors for fish rearing, passage and migration, if the habitat is healthy and vigorous and represents a self-renewing resource, and if it is near other SRA habitat areas providing the benefits of a continuous habitat corridor.

Programmatic EIR/EIS

Results from impact analysis will be summarized in the Programmatic EIR/EIS. When presenting results in the Programmatic EIR/EIS, emphasis will be placed on identifying the differences between the alternatives. Impact analysis is not intended to provide specific quantities or numbers relative to changes in resource categories, level of impact or mitigation strategies. An effort will be made to present results in a tabular format for easy comparison, and establish the potential relative magnitude of change within each resource category such as a high, medium or low level of improvement when comparing the preferred program and each of the alternatives.

Summarized results from impact analysis presented in the Programmatic EIR/EIS will be used to:

- Evaluate how well the preferred and alternative programs meet the Program goals and objectives, conform with the Program's solution principles and achieve short- and long-term acceptability; and
- Identify potential improvements or degradation within each resource category for the preferred and alternative programs.